

# Mini UHF Series

## Description

Miniature UHF connectors are designed for use as coaxial interconnections in cellular mobile telephone systems and similar applications where size, weight and cost factors are critical. These connectors will terminate RG-58, -58A, -58B, -58C, and Belden 9258 cables. Crimp type cable plugs and jacks are available as well as panel and printed circuit board receptacles.

## Applications

- Cellular mobile telephone.
- Low cost local area networks.
- Telecommunications

## Features

- These miniature 3/8"-24 thread size UHF connectors provide excellent RF performance for applications up to 2.5 GHz. This compares to the limit of 300 MHz for the standard 5/8" -24 thread size UHF connectors normally associated with CB applications. Combining excellent electrical characteristics, small size and light weight, mini-UHF connectors feature crimp-type cable termination providing low installation cost.
- Interface according to IEC 169-34



## Specification

Mini UHF coaxial connectors are designed for use in applications from DC to 2.5 GHz where size, weight and cost elements are crucial. These miniature 3/8 " -24 thread size connectors provide excellent RF performance and are impedance matched to 50 ohm cable. Crimp, twist-on and solder terminations are available with the Mini-UHF series. Mini-UHF connectors combine excellent electrical characteristics, small size and light weight at a relatively inexpensive cost for many coaxial connector applications.

### Electrical

Impedance	50 ohm
Frequency Range	0 to 2.5 GHz
VSWR	1.25max
Voltage Rating	335 VRMS max
Dielectric Withstanding Voltage	1000 VRMS max
Contact Resistance	Center Contact = 5.0 Milliohms max Outer Contact = 5.0 Milliohms max
RF Leakage	-55 dB min@2.5GHz
Insetion Loss	.2 dB max@ 2.5GHz
Insulator Resistance	5,000 Megohms min

### Mechanical & Environmental

Mating	3/8-24 UNEF threaded coupling
Cable Retention	RG-58, 141,142, 223 → 40 lbs min RG-174, 188, 316 → 20 lbs min
Durability	500 matings(for beryllium copper female contact only)
Temperature Range	-55 C to 85 C
Vibration	MIL-STD-202 Method 204 Test CondB
Salt Spray	MIL-STD-202 Method 101 Test CondB

### Material

Parts Name	Material	Plating
Body	Brass	Nickel
Center Contact	Male: Brass Female: Brss, Phosphor Bronze or Beryllium Copper	Gold
Insulator	PTFE or Delrin	None
Crimp Ferrule	Annealed Copper	Same as Body

Note: Other Material/Finish is Available on Request.



## Crimp Attachment for Flexible Cable

### Mini UHF Crimp Plug

<p>M101</p>		Hand Tool	See Appendix B
		Cable	RG58/U
		Cable Assembly Instruction	See Appendix A

### Mini UHF Straight Crimp Plug

<p>M102</p>		Hand Tool	See Appendix B
		Cable	RG8/X, 58/U, 174/U, 316/U
		Cable Assembly Instruction	See Appendix A

### Mini UHF Push-on Crimp Plug

<p>M105</p>		Hand Tool	See Appendix B
		Cable	RG58/U
		Cable Assembly Instruction	See Appendix A Code E

### Mini UHF Crimp Jack

<p>M201</p>		Hand Tool	See Appendix B
		Cable	RG58/U, 174/U, 316/U
		Cable Assembly Instruction	See Appendix A Code E